TOWN OF TROY WATER/SEWER
P.O. BOX 215
151 DORT STREET
TROY, NH 03465
(603)-242-3890
troywater@myfairpoint.net

Town of Troy Water Works
Water Conservation Plan
2009

Open Hours are Monday – Thursday 7:00 a.m. to 3:00 p.m. and Friday from 7:00 to 12:00 p.m.
Meetings the 2nd and 4th Wednesday of each month starting at 5:00 p.m.

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Section 1.0 GENERAL INFORMATION

Well Siting

Has a Preliminary Well Siting report been submitted to the DES? (If your answer is **NO**, please contact the DES at (603) 271-2947 before you proceed further)

YES X NO___

1.1 Project Contacts / System Ownership

1.1a Project Contact (Person completing this form?)

Name Randy Luopa
Address 151 Dort Street, P.O. Box 215, Troy, NH 03465
Company Troy Water Works
Phone Number 603-242-3890

1.1b Project Owner (Who is responsible for compliance with the water conservation plan, as approved by the DES?)

Name Bert Lang
Address 151 Dort Street, P.O. Box 215, Troy, NH 03465
Company Troy Water Works
Phone Number 603-242-3890

1.1c Person responsible for completing the activities outlined in this plan (Please note that the person completing water conservation plan activities must be a certified water system operator or water system personnel supervised by the certified operator.)

Name Randy Luopa
Address 151 Dort Street, P.O. Box 215, Troy, NH 03465
Company Troy Water Works
Phone Number 603-242-3890

1.1d Will ownership of the water system be transferred at a future date from the person listed in 1.1b to a homeowner's association or other entity?
YES___ NO X

If **YES**, indicate below the contact information for the new owner of the water system.

Name _____
Address _____
Company _____
Phone Number _____

1.2 Type of Water System

1.2a Is this a new source for a new or existing community water system owned by a landlord who supplies water to tenants and includes water service in rental fee?
YES _X_ NO ____ (If **YES**, you must complete **Sections 2.2, 3.0, 5.0** and **6.0**)

1.2b Is this a new source for an **existing** community water system that does not meet the definition in 1.2a?
YES___ NO___ (If **YES**, you must complete **Sections 2.2, and 3.0 through 6.0**)

1.2c Is this a new source for a **new** community water system that **does not** meet the description in 1.2a above?
YES___ NO___ (If **YES**, you must complete **Sections 2.1, and 3.0 through 6.0**)

Section 2.0 METERS, UNACCOUNTED FOR WATER, AUDITS, AND LEAK DETECTION

2.1 New Small Community Water Systems

2.1a Meter Selection and Installation

Meters must be installed on all sources of water and at each service connection on new small community water systems that do not meet the definition of 2.1a above. Describe below the size of both the source and service connection meters to be utilized by the water system. (In selecting and installing water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association. www.awwa.org/bookstore)

5/8" Service Meters
2 - 3 Source Water Meters

2.1b Meter Reading Frequency

Describe below the frequency in which each type of meter will be read. (Source meters must be read at least every 30 days and service meters must be read at least every 90 days.)

Source Meter Readings 5 (daily)
Service Meters Quarterly (90 days)

2.1c Meter Maintenance / Calibration

Describe the water systems meter maintenance plan and calibration schedule. (In maintaining water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association. www.awwa.org/bookstore)

Source Meters once a year
Service are replacement program

2.1d Estimating Unaccounted-for Water

Describe how often the water system will estimate unaccounted for water. Unaccounted-for water means water for which a specific use cannot be determined due to accounting procedure errors, data processing errors, meter inaccuracies, authorized water use that does not pass through meters, leaks, seepage, overflow, evaporation, theft, unauthorized water use, or malfunctioning distribution controls. (Estimates of unaccounted-for water must be performed at least once a year. If unaccounted-for water exceeds 15 percent, the system shall develop a response plan in accordance with Env-Ws 390.05(j) and (k), and submit it to the DES within 60 days. The water system must implement the response plan upon receiving approval from DES.)

Troy Water will continue to do quarterly
estimates on water loss rates

2.1e Water Audit and Leak Detection Program

Describe below who will be responsible for conducting a leak detection survey, the frequency of the surveys and a description of how those surveys will be conducted. (Surveys for existing systems that are opting out of metering service connections shall be performed at least every two years. Leaks identified by the survey must be repaired within 60 days of discovery unless a waiver is obtained from the DES. The requirements of this section of the rule must follow the standards set forth in AWWA M36, *Manual of Water Supply Practices, Water Audits and Leak Detection*, available from the American Water Works Association. www.awwa.org/bookstore). (All new small community water systems must meet this requirement.)

Troy Water Works is responsible for conducting leak detection survey yearly.

Leak detection equipment

2.2 Existing Small Community Water Systems, New or Existing Water Systems Owned by a Landlord Who Supplies Water only to Tenants and Includes Water Service in a Rental Fee

(If this is an existing small community water system, **or** a new system that meets the definition in Section 2.1 (a), the water system has the choice to either:

1. Install meters on all service connections within three years of approval of the plan and estimate unaccounted-for water [see section 2.2b – 2.2e], or all meters done
2. Conduct a comprehensive leak detection survey every two years [See section 2.2f]. Yes

2.2a Is your system choosing to install meters on your system to track unaccounted-for water?

YES_X_
NO ___

If **YES,** your system must estimate unaccounted-for water annually, complete sections **2.2b, 2.2c 2.2d and 2.2e.** If you answered **NO,** your system must perform a leak detection survey every two years, go to section **2.2f.**

2.2b Meter Selection and Installation

Meters must be installed on all sources of water and at each service connection. Describe below the size of both the source and service connection meters to be utilized by the water system. (In selecting and installing water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association. www.awwa.org/bookstore)

5/8" service meters
2" - 3" Source meters

2.2c Meter Reading Frequency

Describe below the frequency in which each type of meter will be read. (Source meters must be read at least every 30 days and service meters must be read at least every 90 days.)

Service Quarterly (90 days)
Source meters daily

2.2d Meter Maintenance / Calibration

Describe the water systems meter maintenance plan and calibration schedule. (In maintaining water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association. www.awwa.org/bookstore)

Source metes yearly
Service meters are replacement program

2.2e Estimating Unaccounted-for Water

Describe how often the water system will estimate unaccounted for water. Unaccounted-for water means water for which a specific use cannot be determined due to accounting procedure errors, data processing errors, meter inaccuracies, authorized water use that does not pass through meters, leaks, seepage, overflow, evaporation, theft, unauthorized water use, or malfunctioning distribution controls. (Estimates of unaccounted-for water must be performed at least once a year. If unaccounted-for water exceeds 15 percent, the system shall develop a response plan in accordance with Env-Ws 390.05(j) and (k), and submit it to the DES within 60 days. The water system must implement the response plan upon receiving approval from DES.)

Quarterly - Yearly

2.2f Leak Detection Program

Describe below who will be responsible for conducting a leak detection survey, the frequency of the surveys and a brief text description of how those surveys will be conducted. (Surveys for existing systems that are opting out of metering service connections shall be performed at least every two years. Leaks identified by the survey must be repaired within at least 60 days unless a waiver is obtained from the DES. The requirements of this section of the rule must follow the standards set forth in AWWA M36, *Manual of Water Supply Practices, Water Audits and Leak Detection*, available from the American Water Works Association. www.awwa.org/bookstore)

Troy Water Works leak detections will occur during hydrant flushing program, with leak detection equipment owned by Water Works

Section 3.0 PRESSURE REDUCTION

(Pressure reduction shall be implemented upon obtaining approval of a new source of water when it is technically feasible, consistent with industry standards, and consistent with public health and safety considerations. Existing small community water systems have one year after approval of the conservation plan to implement this requirement, if feasible. All pressure reduction measures must meet the requirements of Env-Ws 372, Design Standards for Small Community Public Water Systems.)

Is pressure reduction technically feasible for this system? If **YES**, explain below how it will be accomplished for the system. If **NO**, explain why below.

YES___ NO_X_

Due to geographical area system lay out

Section 4.0 CONSERVATION RATE STRUCTURE

(All new small community water systems must adopt a rate structure as described in Env-Ws 390.04.)

Describe below the conservation rate structure the water system proposes adopting, **or** if not practical or feasible for the system, describe below how the water system will manage water service fees to meet the intent of the rule and promote water conservation. (You will need to fill out a waiver application form found at the end of this document.)

Section 5.0 PUBLIC NOTIFICATION

(Within seven days of submitting the final water conservation plan for review by the DES a small community water system must provide a copy of this report via certified mail to the governing board of the municipality in which a proposed source is located, to all wholesale customers [if any], and to the regional planning commission for the location of the proposed source. The water system shall supply the governing boards with a copy of a summary of the requirements of Env-Ws 390. This document can be found at http://www.des.nh.gov/h2o_conservation.htm. You must also note in your correspondence to the above-mentioned governing boards that a copy of the Well Siting Application is available for their review at the DES and provide them with DES contact information. The water system shall request that the governing boards amend any site plan submitted to them for review so that it reflects the requirements of Env-Ws 390 and promotes water conservation landscaping principals.)

to Town

none

Southwest Regional Planning

List the names and addresses of the governing boards receiving public notification. Attach a copy of the cover letter sent to the governing boards and a copy of the certified mail receipts when available. List the educational/outreach materials that the system is providing to the municipalities for review.

Yes

Section 6.0 EDUCATIONAL OUTREACH INITIATIVE

(Such an initiative may be achieved in many ways, but must be implemented immediately upon approval of the conservation plan and should include the pertinent water efficiency fact sheets that can be found at the website listed at the beginning of this report. These educational mailings can be included with wellhead protection program educational mailings as required by Env-Ws 378.18 or with the water system service bills. Other acceptable outreach initiatives include water system or homeowner's association newsletters, posting of water conservation fact sheets in public areas used by water system customers, or any other initiative that meets the intent of the rules.)

Provide a brief description of your educational outreach initiative. Include implementation procedures, the person responsible for the initiative, the content of educational mailings proposed (if any), and the wording of any newsletter insertions or public postings. (There is no need to provide copies of educational outreach materials that you are acquiring from DES. Only provide copies of educational outreach materials generated by the water system.)

Troy Water Works has continued to do outreach in mailings and public places posting aka: Town Library, Town Hall Town Post Office, Sewer Plant

Before submitting, thoroughly check this form to be sure all applicable questions are answered, all information is provided, and all necessary attachments are included. Incomplete submittals will significantly slow the approval process.

If strict compliance with any of the requirements of Env-Ws 390 is not feasible, the small community water system may apply for a waiver to a specific portion of the rule. A waiver application form is provided at the end of this document for your convenience.

Preparer's Signature _____

Date January 27, 2009

As a reminder, have you included the following?

- Educational outreach initiative documentation and materials created by the water system.
- Public notification documentation (certified mail receipts).
- Public notification cover letters and pertinent documents.
- Other pertinent or supportive materials.

Town
Southwestern Regional Planning

Requirements for New Source for an existing large community water system

• TWW in accordance with 2101.05 (b) has installed meters on all public sector water uses.

• TWW in accordance with 2101.05 (d) has selected Neptune HP Turbine Tricon-E Remote Reading System 4-20MA 1 1-1/2 for its new sources.

• TWW replacement program for all public sector is to replace meters every ten years (10).

• TWW Has purchased an Aqua-Scope by Heath for its leak detection program, as stated the program runs con-current with directional hydrant flushing program. Due to the size of TWW Distribution System 100% of the system can be surveyed during flushing.

• TWW in accordance with 2101.05 (i) the department's unaccounted for water goal is to always remain below 15% water loss. Current estimates are 9% calculated as water made vs water billed.

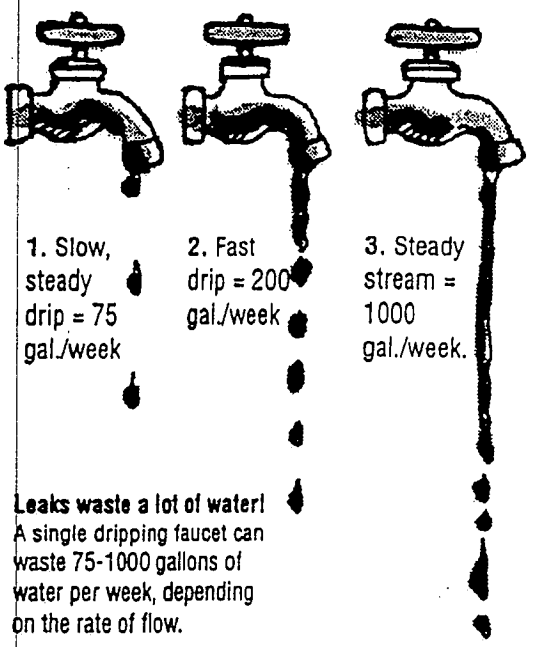
•TWW in accordance with 2101.05 (n) The Town of Troy being served is in a valley. To summarize this due to tank and source locations being on one side of this valley, reducing the pressure in the valley floor would reduce the pressure for the customers on the opposite side of the valley.

•TWW in accordance with 2101.05 (o) current rate structure is at $49.50 for the first 500 cubic feet then the remainder is 4.95 per 100 cubic feet. TWW has already adopted this rate structure for Enq-wq 2101.05 (o) (1) a. b. (2) a. b.

•TWW in accordance with 2101.05 (p) Outreach runs concurrent with billing. Billing is quarterly. Please review prior mailing insert.

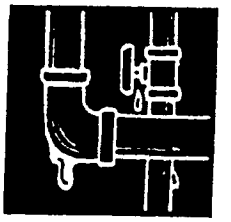
Open Hours are Monday – Thursday 7:00 a.m. to 3:00 p.m. and Friday from 7:00 to 12:00 p.m.
Meetings the 2nd and 4th Wednesday of each month starting at 5:00 p.m.

Stop Leaks/Save Water



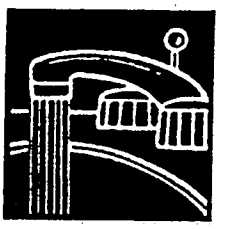
Leaks waste a lot of water! A single dripping faucet can waste 75-1000 gallons of water per week, depending on the rate of flow.

A Simple Test for Leaks

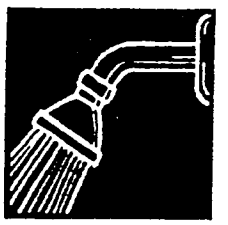


A leaky faucet is pretty obvious. But hidden leaks in the toilet, under the sink, or behind a washing machine can waste a gigantic amount of water. And they could be damaging your floor or ceiling too. Take a reading of your water meter. Wait an hour, making sure no one uses any water in your home. Check it again. If the reading has changed, you have got at least one leak. Investigate!

Faucets and Showerheads



Dripping, trickling, or oozing faucets and showerheads can waste from 75 to several hundred gallons of water a week depending on the size of the drip. Worn out washers are the main cause of these leaks and they cost about 25 cents to replace.

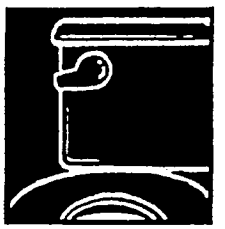


Faucets typically use 2 to 7 gallons per minute. Installing a low-flow faucet aerator can reduce the flow by as much as 25% or up to a gallon and a half per minute. Be sure to remove your aerator periodically to clean the particles that may have collected in the screen.

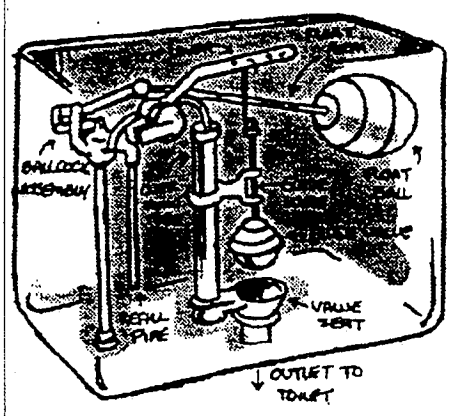
Toilets

That trickling sound that you hear at night could be wasting 50 gallons of water a day or more. But sometimes it leaks silently. Try this:

Crush a dye tablet in its envelope and carefully empty the contents into the center of the toilet tank and allow it to dissolve. Wait about 8-9 minutes. Inspect the toilet bowl for signs of blue dye indicating a leak.



If the dye has appeared in the bowl, your flapper or flush valve may need to be replaced. Parts are inexpensive and fairly easy to replace. If no dye has appeared in the 8 to 9 minutes time, you probably don't have a leak.



There are many variations to the names of each toilet part! Don't be surprised if your "How-To" book calls it something slightly different.